to reexamine their own assumptions. If they want to hold onto their assumptions, they know enough to resist the technology in the first place.

In summary, cultural change in organizational midlife is primarily a matter of deliberately taking advantage of the diversity that the growth of subcultures makes possible. Unless the organization is in real difficulty, there will be enough time to use systematic promotion, organization development, and technological change as the main mechanisms in addition to normal evolution and organizational therapy. Next, we examine the more problematic area—what leaders can do if their organizations are stagnating or declining, if some cultural assumptions seem to be an obstacle, and if there is not enough time to use evolutionary methods.

Organizational Maturity and Potential Decline

Continued success creates strongly held shared assumptions and thus a strong culture. If the internal and external environments remain stable, this is an advantage. However, if there is a change in the environment, some of those shared assumptions can become a liability precisely because of their strength. The mature stage is sometimes reached when the organization is no longer able to grow because it has saturated its markets or become obsolete in its products. Maturity is not necessarily correlated with age, size, or number of managerial generations but rather reflects the interaction between the organization's output and the environmental opportunities and constraints.

Age does matter, however, if culture change is required. If an organization has had a long history of success with certain assumptions about itself and the environment, it is unlikely to want to challenge or reexamine those assumptions. Even if the assumptions are brought to consciousness, the members of the organization are likely to want to hold onto them because they justify the past and are the source of pride and self-esteem. Such assumptions now operate as filters that make it difficult for key managers to understand alternative strategies for survival and renewal (Donaldson and Lorsch, 1983; Lorsch, 1985).

Outside consultants can be brought in and clear alternatives can be identified. However, no matter how clear and persuasive a consultant tries to be, some alternatives will not even be understood if they do not fit the old culture, and some alternatives will be resisted even if understood because they create too much anxiety or guilt and sufficient psychological safety is lacking. Even if top management has insight, some new assumptions cannot be implemented down the organizational line because people simply will not comprehend or accept what the new strategy may require (Davis, 1984).

For example, several parts of the Multi Company had to confront the unpleasant reality that patents on some of their better products had run out; that younger, more flexible, and more aggressive competitors were threatening; that there was overcapacity in several of their major markets because the entire industry overestimated the market potential; and that it was not clear whether there was enough "left to be invented" to warrant the continued emphasis on research. The company needed to become more innovative in marketing and had to shift its creative energy from R & D to manufacturing process innovation to bring its costs down. Because the culture was built around research, however, the creative marketers and the innovative production engineers had a hard time getting attention from senior management. The research department itself needed to become more responsive to the marketplace, but it still believed that it knew best. Even senior managers who could see the dilemma were caught in their own shared assumptions because they could not challenge and overrule some of the powerful research people and the culture dictated that they stay off each other's turf.

In such a situation, the basic choices are between more rapid transformation of parts of the culture to permit the organization to become adaptive once again through some kind of turnaround and the destruction of the organization and its culture through a process of total reorganization via a merger, an acquisition, or bankruptcy proceedings. In either case, strong new change managers or "transformational leaders" are likely to be needed to unfreeze the organization and launch the change

programs (Kotter and Heskett, 1992; Tichy and Devanna, 1986). As I have emphasized before, such unfreezing must not only involve the disconfirmation and induction of guilt or anxiety; it must also offer psychological safety by providing a new vision, a new set of alternatives, and a plan for how to get there that reassures members of the organization that change is possible.

Managed Change Through Infusion of Outsiders

Shared assumptions can be changed by changing the composition of the organization's dominant groups or coalitions. The most potent version of this change mechanism occurs when a board of directors brings in a new CEO or when a new CEO is brought in as a result of an acquisition, a merger, or a leveraged buyout. The new CEO usually brings in some of his or her own people and gets rid of people who are perceived to represent the old and increasingly ineffective way of doing things. In effect this destroys the group or hierarchical subculture that was the originator of the total culture and initiates a process of new culture formation. If there are strong functional, geographic, or divisional subcultures, the new leaders usually have to replace the leaders of those units as well.

Dyer (1985, 1986) has examined this change mechanism in several organizations and found that it follows certain patterns: (1) the organization develops a sense of crisis because of declining performance or some kind of failure in the marketplace and concludes that it needs new leadership; (2) simultaneously, there is a weakening of pattern maintenance in the sense that procedures, beliefs, and symbols that support the old culture break down; (3) a new leader with new assumptions is brought in from the outside to deal with the crisis; (4) conflict develops between the proponents of the old assumptions and the new leadership; and (5) if the crisis is eased and the new leader is given the credit, he or she wins out in the conflict and the new assumptions begin to be embedded and reinforced by a new set of pattern maintenance activities.

People may feel that they don't like the new approach but

can't argue with the fact that it made the company profitable once again, so maybe they have to try the new ways. Members who continue to cling to the old ways are either forced out or leave voluntarily because they no longer feel comfortable with the direction the organization is taking and how it does things. However, if improvement does not occur or the new leader is not given credit for the improvement that does occur or the new assumptions threaten too much of the core of the culture, the new leader will be discredited and forced out. (This situation occurs frequently when this mechanism is attempted in young companies where founders or owning families are still powerful. In such a situation the probabilities are high that the new leader will violate owner assumptions and be forced out by them.)

To understand fully the dynamics of the process described by Dyer (1985, 1986), one would, of course, need to know more about why and how the pattern maintenance mechanisms have become weakened. One common cause of such weakening is a change in ownership. For example, when founders or founding families give up ownership of the company or ownership changes as a result of merger, acquisition, or leveraged buyout, this structural change substantially reduces the supports to the present cultural assumptions and opens the door to power struggles among diverse elements. This further weakens whatever cultural assumptions were in place. If strong subcultures have formed and one or more of them are strongly tied to outside constituencies that hold different assumptions, the existing culture is further weakened. For example, when employees vote to join a union and that union is part of a strong international union, management loses some degrees of freedom and new assumptions are likely to be introduced in the internal integration area. A similar effect can occur when senior management is increasingly selected from one function such as finance and that function becomes more responsive to the stockholders, whose interests may not be the same as those of the marketing, manufacturing, or technical people inside the organization.

Culture change is sometimes stimulated by systematically bringing outsiders into jobs below the top-management level and allowing them gradually to educate and reshape top manage-

ment's thinking. This is most likely to happen when the outsiders take over subgroups, reshape the cultures of those subgroups, become highly successful, and thereby create a new model of how the organization can work (Kuwada, 1991). Probably the most common version of this process occurs when a strong outsider or an innovative insider is brought in to manage one of the more autonomous divisions of a multidivisional organization. If that division becomes successful, it generates not only a new model for others to identify with but creates a cadre of managers who can be promoted into more senior positions and thereby influence the main part of the organization.

For example, the Saturn car division and the NUMI plant of General Motors were deliberately given freedom to develop new assumptions about how to involve employees in the design and production of cars and thus learned what amount to some new cultural assumptions about human relationships. This approach is a more drastic version of what was earlier described as creating a parallel organization as part of an organization development project. Similarly, GM also acquired Electronic Data Systems as a technological stimulus to organizational change. In each of these cases, however, we also see that having an innovative subculture within the larger culture does not guarantee that the larger culture will reexamine or change its culture. The innovative subculture helps in disconfirming some of the core assumptions, but again, unless there is sufficient anxiety, guilt, or psychological safety, the top-management culture may remain impervious to the very innovations it has created.

The infusion of outsiders inevitably brings various cultural assumptions into conflict, raising discomfort and anxiety levels. Leaders who use this change strategy must therefore also figure out how to manage the high levels of anxiety and conflict that they have wittingly or unwittingly unleashed. Here again, strong visions help provide alternative pathways to the ones that must be abandoned.

Change Through Scandal and Explosion of Myths

As a company matures, it develops a positive ideology and a set of myths about how it operates, what Argyris and Schön

(1974, 1978) have labeled "espoused theories." At the same time, the company continues to operate according to the assumptions that have worked in practice, which Argyris and Schön call "theories-in-use" and which more accurately reflect what actually goes on. Moreover, it is not unlikely that the espoused theories, the announced values of the organization, come to be in varying degrees out of line with the actual assumptions that govern daily practice.

For example, an organization's espoused theory may be that it takes individual needs into consideration in making geographical moves; yet its theory-in-use may be that anyone who refuses an assignment is taken off the promotional list. An organization's espoused theory may be that it uses rational decision-making techniques based on market research in introducing new products; yet its theory-in-use may be that it indulges the biases and pet projects of a certain key manager. An organization may espouse the value of teamwork, but all of its practices may be strongly individualistic and competitive. An organization may espouse concern for the safety of its employees, but its practices may be driven by assumptions that one must keep costs down to remain competitive, leading to unsafe practices. If in the history of the organization nothing happens to expose these incongruities, myths that support the espoused theories and values may grow up, thus even enhancing reputations that are out of line with realities. The most common example today is the myth in many companies that they never lay off anybody.

Where such incongruities between espoused values and actual assumptions exist, scandal and myth explosion become relevant as mechanisms of culture change. Nothing changes until the consequences of the actual operating assumptions create a public and visible scandal that cannot be hidden, avoided, or denied. For example, in the company that prided itself on taking individual feelings into account in overseas moves, a senior executive who had been posted to an overseas position that he did not want committed suicide. He left a note that was revealed to the newspapers in which he made it clear that he felt the company had forced him to take the undesirable assignment. This event suddenly exposed an element of the culture in such a way

that it could not be denied or rationalized away. The company immediately instituted a new set of procedures built on the espoused values and began a painful process of reconstructing some elements of its career development philosophy.

In the case where one manager's biases dominated the decision-making process in regard to the introduction of new products, what eventually happened was that one of the products he had insisted on failed in such a dramatic way that a reconstruction of why it had been introduced had to be made public. The manager's role in the process was revealed by unhappy subordinates and was labeled as scandalous. He was moved out of his job, and a more formal product introduction process was immediately mandated.

Disasters such as those at the Chernobyl nuclear plant and the Bhopal chemical plant, the Alaskan oil spill, and the explosion of the *Challenger* space shuttle triggered a process in each of the organizations involved of forcefully reexamining practices in regard to safety. Disasters and scandals do not automatically cause culture *change*, but they are a powerful disconfirming force that cannot be denied and that therefore starts the process of unfreezing and thereby provides the organization an opportunity to launch a change process that brings its assumptions more in line with internal and external environmental realities.

Though rarely made public, insiders sometimes create or engineer scandals in order to induce some of the change they want by leaking information to the right place at the right time. Such leaks are sometimes defined as whistle-blowing in the sense of exposing internal inconsistencies. Since whistle-blowing has the potential for precipitating a crisis that may force some cultural assumptions to be reexamined, one can see why people are cautious about it and why the organization often punishes it.

Change Through Coercive Persuasion

The concept of coercive persuasion was originally derived from my studies of prisoners of war who had undergone major belief and attitude changes during their three to five years or more of captivity during and after the Korean War (Schein, 1961a).

The key to understanding some of the dramatic changes that the captives underwent is to realize that if one has no exit option, one is subject to strong unfreezing forces, which sooner or later will motivate one to find new information that will permit cognitive redefinition to occur. Prisoners at first vehemently denied their guilt, thought it was ridiculous to be accused of espionage and sabotage, offered to make false confessions— which only produced more severe punishment—and in other ways attempted to cope but did not question their own assumption base.

After months or years of harassment, interrogation, physical punishment, pressure from cell mates, indoctrination, and the threat that they would be in prison forever unless they saw the light and made an honest confession, the prisoners started to search for an answer. They found it when they began to realize that such terms as *guilt, crime, espionage,* and *sabotage* have different meanings in different cultures and political systems. They were able to make sincere confessions once they cognitively redefined concepts such as guilt and crime, thereby making some fundamental changes in their assumptions about themselves.

What does all this have to do with culture change? Situations where elements of the old culture are dysfunctional but strongly adhered to are comparable to what the captor was up against with prisoners who asserted their innocence. The key to producing change in such situations is first to prevent exit and then to escalate the disconfirming forces while providing psychological safety. Although this is difficult to execute, it is precisely what effective turnaround managers do. By using the right incentives, they make sure that the people whom they wish to retain in the organization find it difficult to leave. By consistently disconfirming the old behavior patterns or actually mandating new behavior patterns, as in the case of the CEO who insisted on painting company trucks white, they make it difficult for people to sustain the old assumptions. By consistently being supportive and rewarding any evidence of movement in the direction of new assumptions, effective managers provide some psychological safety. If psychological safety is sufficient, members of the organization can begin to examine and possibly give

up some of their cognitive defenses. If they cannot, the turn-around manager is faced with removing them. In any case, the essence of this mechanism is that the turnaround manager re-tains his or her power indefinitely, thus preventing members of the organization from developing a strategy of just waiting until he or she is gone.

Change Through Turnarounds

Turnaround as a mechanism is really more a combination of many of the foregoing mechanisms fashioned into a single pro-gram by a talented change manager or team of change agents. In turnaround situations I have observed or heard about, what strikes me is that all the mechanisms previously described may be used in the total change process. The first condition for change, as always, is that the organization must be unfrozen. Either be-cause of external realities that threaten organizational survival or because of new insights and plans on the part of the board of directors, the CEO, or the dominant management coalition, the organization comes to recognize that some of its past ways of thinking, feeling, and doing things are indeed obsolete. A new CEO or a redefined turnaround role for the present leader is put into place, and a change program is launched as a turnaround.

Once the organization is unfrozen, change is possible if there is a turnaround manager or team with a clear sense of where the organization needs to go, a model of how to change culture to get there, and the power to implement the model. If any one of these elements is absent, the process will fail, and in any case, the anxieties that arise from implied change must be actively managed. For example, if major replacement of peo-ple in critical positions is involved, that process must be managed in such a way that it is seen as necessary and carried out ac-cording to some of the deeper cultural assumptions that may need to be preserved. Otherwise, the employees on whom the organization is still counting will become too anxious and un-productive.

Turnarounds usually require the involvement of all orga-

nization members so that the dysfunctional elements of the old culture become clearly visible to everyone. The process of developing new assumptions then becomes a process of cognitive redefinition through teaching, coaching, changing the structure and processes where necessary, consistently paying attention to and rewarding evidence of learning the new ways, creating new slogans, stories, myths, and rituals, and in other ways coercing people into at least new behavior. All the other mechanisms described earlier come into play, but the willingness to coerce is the key to turnarounds.

Two fundamentally different leadership models have been promulgated for managing turnarounds or, as they have come to be known more popularly, transformations. In the *strong vision model*, the leader has a clear vision of where the organization should end up, specifies the means by which to get there, and consistently rewards efforts to move in that direction (Tichy and Devanna, 1986; Bennis and Nanus, 1985; Leavitt, 1986). This model works well if the future is reasonably predictable and a visionary leader is available. If neither of these conditions can be met, organizations can use the *fuzzy vision model*, where the new leader states forcefully that the present is intolerable and that performance must improve within a certain time frame but then relies on the organization to develop visions of how actually to get there (Pava, 1983). The "we need to change" message is presented forcefully, repeatedly, and to all levels of the organization. As various proposals for solution are generated throughout the organization, the leader selects and reinforces the ones that seem to make most sense. This model is obviously more applicable in situations where the turnaround manager comes from the outside and therefore does not initially know what the organization is capable of. It is also more applicable when the future continues to be turbulent in that it begins to train the organization to become conscious of how to change its own assumptions as part of a continuous adaptive process.

Turnarounds must usually be supplemented with longer-range organization development programs to aid in new learning and to help embed new assumptions. It is not enough to

have strong leaders to unfreeze the system and get the change started because change may have to be managed in all of the organization's subcultures, a process that takes a great deal of time. It is much more difficult to embed new assumptions in a mature organization than in a young and growing one because all of the organization structures and processes have to be rethought and, perhaps, rebuilt.

Change Through Reorganization and Rebirth

Little is known or understood about the process of reorganization and rebirth, so little will be said about it here. Suffice it to say that if one physically destroys the organization that is the carrier of a given culture, by definition that culture is destroyed and whatever new organization begins to function begins to build its own new culture. This process is traumatic and therefore not typically used as a deliberate strategy, but it may be relevant if economic survival is at stake.

Organizational changes that are true transformations, not merely incremental adaptations, probably reflect culture changes at this level. In the evolution of companies such transformations occur periodically, and at those times the direction of the changes is not always predictable (Tushman and Anderson, 1986; Gersick, 1991). Change at this level sometimes results from mergers, acquisitions, or leveraged buyouts if the new owners decide to completely restructure the organization and are willing to get rid of most of the key managers of the old culture in the process.

Summary and Conclusions

Chapters Fifteen and Sixteen have described various mechanisms and processes that leaders in their role as change agents use to change cultural assumptions. Different functions are served by culture at different organizational stages, and the change issues are therefore different at each stage. In the formative stage of an organization, the culture tends to be a positive growth force, which needs to be elaborated, developed, and

articulated. In organizational midlife the culture becomes diverse in that many subcultures will have formed. Deciding what elements need to be changed then becomes one of the tougher strategic issues that leaders face. At this time, however, leaders also have more options to change assumptions by differentially rewarding different subcultures. In the maturity and decline situation, the culture often becomes partly dysfunctional and can only be changed through more drastic processes such as scandals and turnarounds.

The eleven different change mechanisms described in Chapters Fifteen and Sixteen are cumulative. That is, cultural evolution, the systematic promotion of hybrids, organizational therapy, and the systematic manipulation of subcultures are prerequisites to organization development, technological seduction, and the systematic infusion of outsiders. Myth explosion through scandals is geared more to initial unfreezing, but then change also requires at least the foregoing mechanisms and possibly coercive persuasion, turnarounds, and more severe destruction and rebirth as well.

In each case, the change process must be understood as involving some unfreezing forces, consisting of disconfirming information, the creation of guilt or anxiety, and the creation of psychological safety. Once unfrozen, the organization must have some mechanisms to permit cognitive redefinition as a way of developing new assumptions. The change process must also provide the opportunity for refreezing, which occurs when new cultural assumptions consistently solve problems or reduce anxieties.

The implications for leadership are multiple. The most important point is that leadership starts the change process in the first place. This involves a number of different functions that are often not well understood by leaders. First, they often have to provide the disconfirming information that initiates the change process, and they have to induce the anxiety and guilt to motivate change. Even more important, at the same time leaders must find a way to provide enough psychological safety to get the members of their organization to accept the need for change and begin the traumatic learning process that is typically in-

volved. The tremendous emphasis that recent writers have put on leaders having visions, being able to communicate and articulate those visions, and having the skills to implement the visions is probably a reflection of the degree to which vision provides some of the key psychological functions of both disconfirming old assumptions and providing enough psychological safety to launch new learning. Visions do not have to be very clear or complete. They have to provide a path and a process of learning to assure the members of the organization that constructive change is possible.

The mechanisms of culture change described in Chapters Fifteen and Sixteen are presented from the leader's perspective. Culture change also occurs as a result of the entry of new people with new assumptions and the different experiences that different parts of the organization have. For purposes of this analysis, those changes are captured in the observation that organizations differentiate themselves over time into many subcultures. The important point to focus on, however, is that it is within the power of leaders to enhance diversity and encourage subculture formation or, through selection and promotion, to reduce diversity and thus manipulate the direction in which a given organization evolves culturally.